Enterprise Wide Scheduling and Registration

TRICARE NORTHEAST DBA CONFERENCE VII

May 12, 2003

Overview

- Background
  - What is EWS-R?
  - Concept exploration process
- Current status
  - Request for Proposal
  - Acquisition Timeline
- Future steps
  - Projected Deployment Schedule

What is EWS-R?

A single medical, dental, and operating room appointing, scheduling, and registration information system that will optimize access to care for all Military Health System beneficiaries and support the electronic health care record (CHCS II) throughout the enterprise.

Functions of EWS-R

- **Scheduling:** planning a list of times of recurring events

- **Appointing:** arranging a health care meeting for the right patient with the right provider, support staff, and equipment at the right place and time

- **Registration:** establishing the beneficiary's relationship with the MHS, including admission, discharge, and transfer

Capabilities of EWS-R

- Ambulatory appointment scheduling
  - Medical, Dental, Radiology
- Inpatient services scheduling
  - Ancillary services, physical therapy
- Operating room scheduling
  - Equipment, supplies, staff, preferences
- Registration functions
  - Admissions, Discharges, Transfers
- Interoperability with VA scheduling system
- Patient self appointing through TRICARE Online

Basic Scheduling Processes

Patient Self-Appointing in TOL

1

Centralized Appointing and Scheduling

1

Clinic level appointing

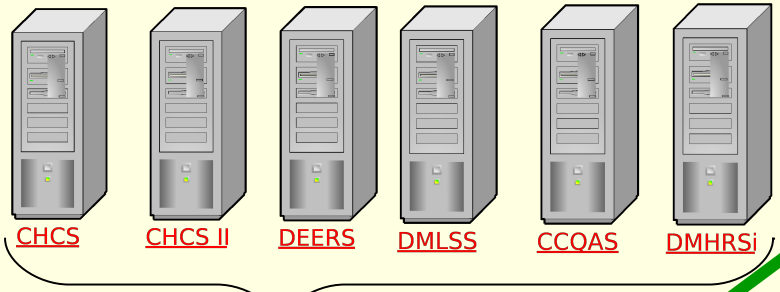
2

3

Registration and Patient Administration

Basic Scheduling Processes

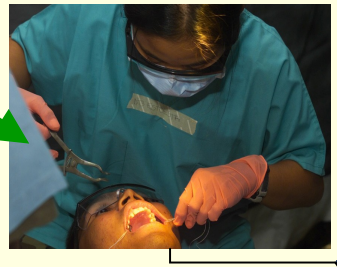
Centralized Appointing and Scheduling



Ancillary Scheduling

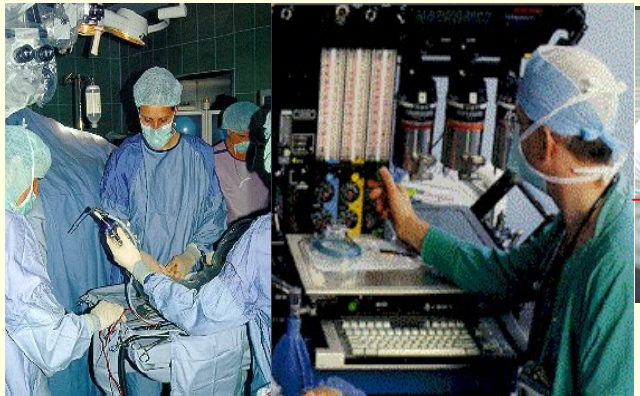
Resources Including:
Providers
Equipment
Spaces
Staff
Preferences
Re-supply

Dental Scheduling

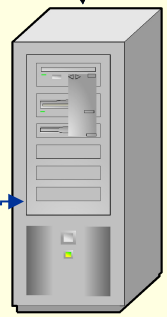


One Stop Shopping

Surgical Scheduling



Patient Encounter



Clinical Data Repository

Benefits of an Enterprise Application

- Supports global mission of the Military Health System
- Supports highly mobile patient and provider populations
  - One third of patients and providers move annually
  - Contingency deployments affect all schedules
- Facilitates one-stop shopping and self-appointing
- Provides fully coordinated operating room scheduling
- Allows standardized training and metrics
- Facilitates integration with other enterprise systems
  - CHCS II, CHCS, DEERS, TOL, DMHRSi, DMLSS, CCQAS

Process and Progress

- Engagement in process from the first
- Enfranchise all key players
- Avoid paving cowpaths
- Accelerate the process where you can
- Understand what you want . . .
  . . . has several possible paths

IM/IT Relationship

- IM delivers requirements while IT acquires solutions
- Excellent communication and partnership is key to success
- IT involvement with concept exploration assures realistic requirements
- IM participation in acquisition assures users get what they want
- IM leads the process up to the point of requirements delivery, then IT takes the lead
- Both remain involved throughout life cycle of project

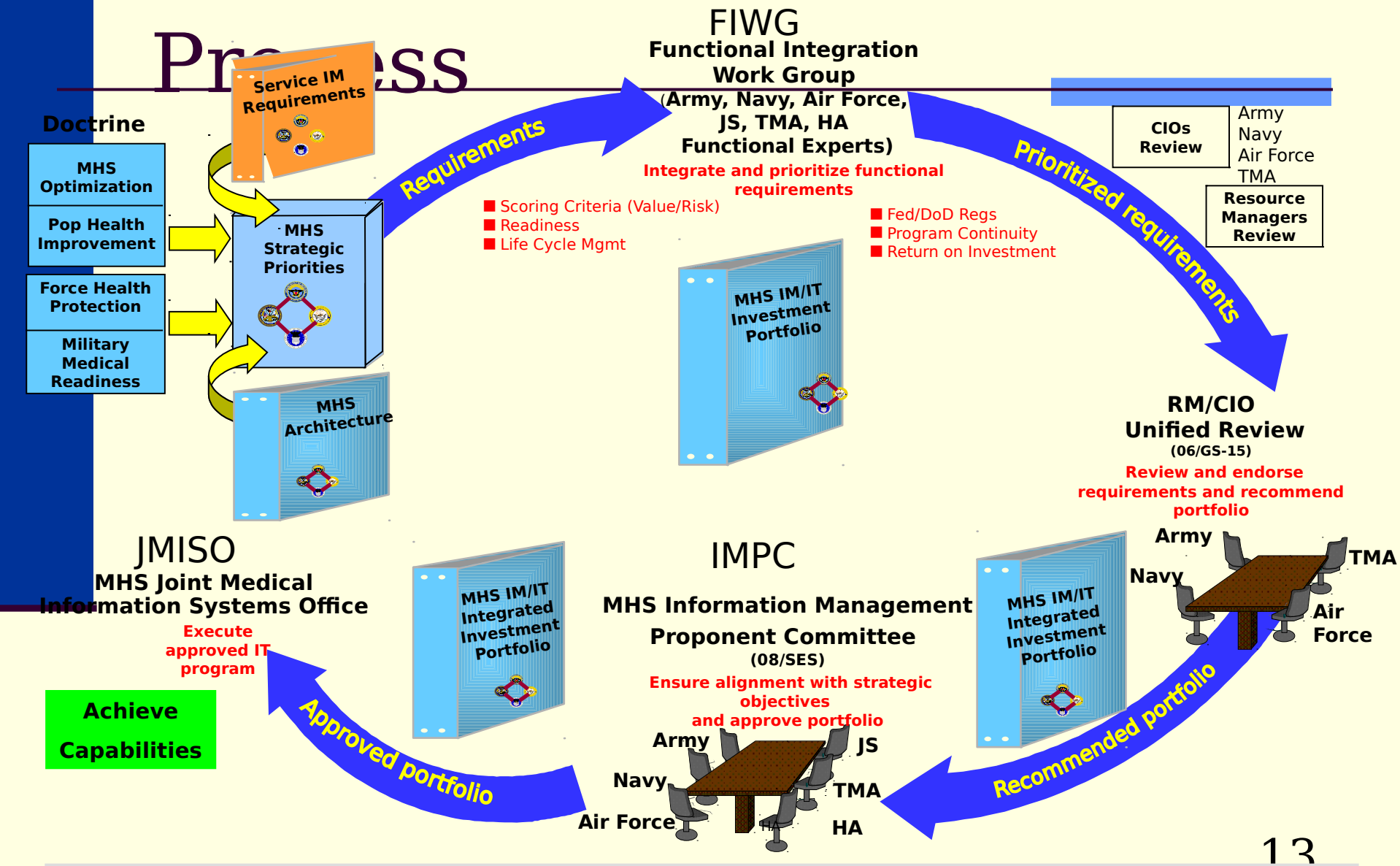
Appointment Standardization

- Appointment Standardization Integrated Project Team
- Led by LTC (Ret) Dave Corey
- Reengineered over 1000 appointment types down to 12
- Instituted mandatory changes in CHCS I worldwide
- Enabled enterprise access to care metrics and reports
- Appt standardization SMEs recruited for EWS-R project

Mission Need Identified

- MHS Optimization Plan: “Our beneficiaries must have easy access to services”
- CHCS II Mission Needs Statement (14 Nov 96)
- CHCS II Operational Requirements Document (ORD) (10Apr 97 revalidated Oct 02)
  - Requires CHCS legacy retirement commencing in FY 07
- Appointing, Scheduling, Registration (including Admission, Discharge, and Transfer functions) comprise 30 - 35 % of legacy CHCS

MHS Investment Portfolio Process



Program Objective Memorandum — Budget Estimate Submission — President's Budget — Annual Execution

Concept Exploration Process

- Identify and recruit the key players (subject matter experts)
- Develop and validate future process models
- Develop and validate requirements
- Map requirements to steps in future process models
- Draft Concept of Operations (CONOPS)
- Earn Service commitment for business process reengineering through CONOPS
- Deliver requirements to Information Technology for acquisition
- Conduct economic analysis and market survey for build vs buy
- Collaborate with other agencies as needed (VA)

Objectives of the EWS IPT

- Validate future process models
- Validate requirements
- Analyze and recommend feasibility of VA-DoD joint solution
- Review, prioritize, and recommend possible solutions

Establish a Working Group

- Initial work group met six months to draft requirements
- Requested TMA-sponsored Integrated Product Team (IPT)
  - Chartered as the EWSWF IPT
  - Kicked off in March 02
- Formed four subgroups or Working IPTs (WIPTs)
  - EWS - Enterprise Wide Scheduling
  - EWR – Enterprise Wide Registration
  - ORM – Operating Room Management
  - EWF – Enterprise Wide Workload Forecasting
- SMEs and support staff recruited for each WIPT

Requirements validation process

- Performed word search of DOORS database
- Drafted proposed requirements for six months prior to IPT
- Developed standardized requirements spreadsheets
- Sent weekly taskers to SMEs by e-mail
- Merged comments into a single document for the meeting
- Discussed over 600 requirements line-by-line
- Validated requirements by consensus
- Completed requirement validation in 12 weeks
- Delivered requirements to RITPO in Jun 02

Requirement Validation Rate

Future Process Models

- Members from all 4 WIPTS met for one week at Falls Church, VA in June 02
- First Consulting Group hired by IM to facilitate meeting
- Drafted and validated as is and to be process models
- Developed role-based scenarios
- Mapped requirements to process models
- Compared requirements between WIPTs to identify gaps and overlaps

CONOPS

- Drafted CONOPS in July-Aug 02
- Includes EWS, EWR, ORM, and EWF as integrated capabilities
- Communicates to Service leadership the business change needed for EWS-R success, independent of the information system solution
- Identifies risk mitigation for EWS-R deployment
- Staffed to Services to gain endorsement of project

Collaboration with VA

- Shared requirements and market survey results
- Excellent communication and rapport
- VA representative was a member of DoD IPT
- Comparison of requirements showed 90% overlap
  - VA wanted outpatient scheduling only
- VA and DoD had different acquisition strategies
  - VA wanted to build, DoD wanted to buy
  - Each agency has valid reasons for their strategy
- Bottom line: Mutual goal is interoperability

EWS-R
What It Does

- EWS-R will be a commercial-off-the-shelf solution (COTS) that enables scheduling and registration across Military Treatment Facilities (MTFs) worldwide

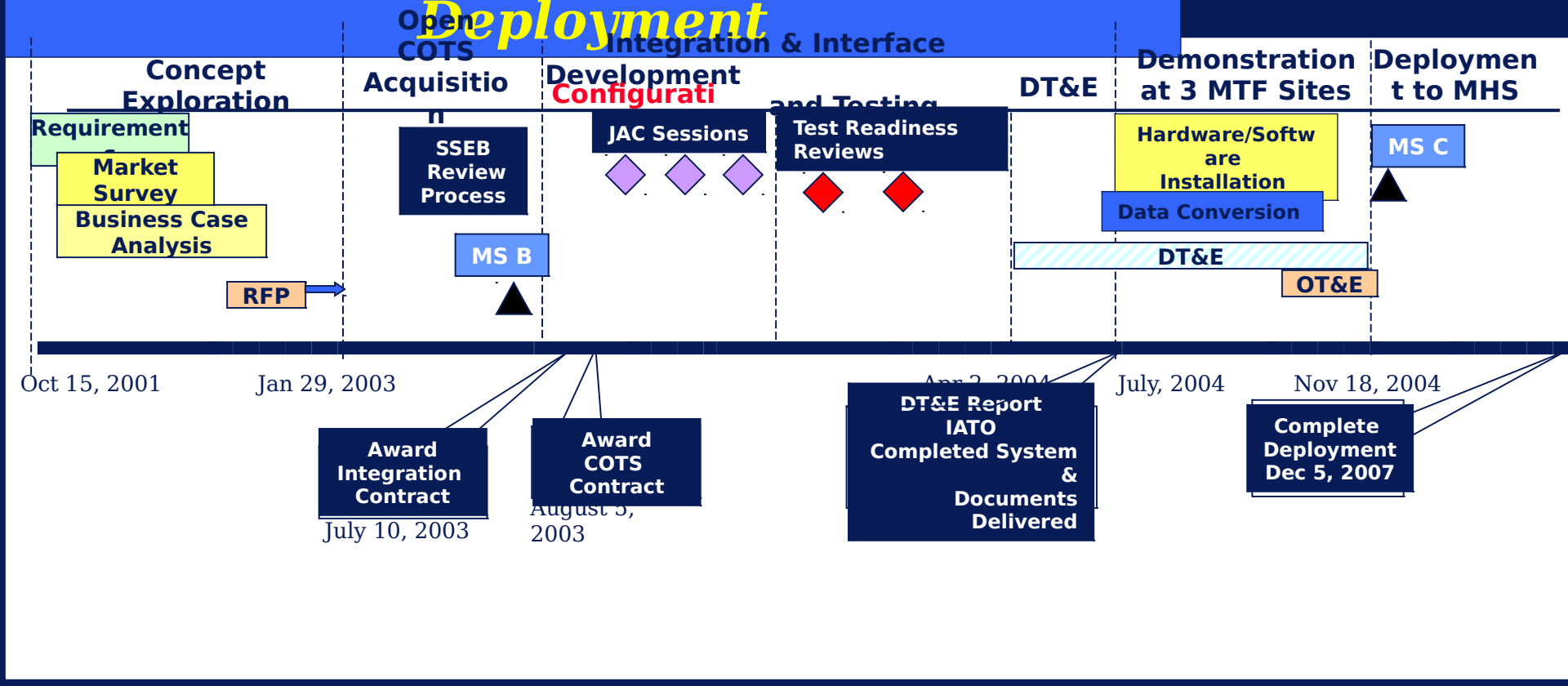
- It will ensure that the patient :
  - accesses the right provider
  - at the right place and time
  - with the right equipment

EWS-R Scenario

- A mother needs to make an appointment for her sick child

EWS-R FY 03-08 Timeline

Schedule for EWS-R Acquisition and Deployment



Acquisition Approach

- Full and open competition for EWS-R COTS solution
- Separate acquisition for services of:
  - Integration contractor
  - Implementation contractor
- Contains options for further Federal acquisition of solution
- Leverages existing DISA and Service infrastructure and compliant with MHS Enterprise Architecture

Why COTS?

- DoD wants to COTS if at all possible.
  - OMB A130 guidance: “Agencies shall (b) Acquire off-the-shelf software from a commercial source, unless the cost effectiveness of developing custom software to meet mission needs is clear and has been documented.”
  - MID #905 17 Dec 02 “. . requires DoD CIO to develop an action plan to vigorously promote policies and establish incentives designed to increase the use of COTS across DoD.”
- Less expensive
- Faster time to market
- Tested product
- Best “**state of the market**” practices

EWS-R FY 03 and 04 Activities

Concept Exploration

- Conduct Market Survey
  - Gartner survey
  - At least 8 capable vendor solutions to >80% of requirements
- Complete Business Case
  - Economic Analysis (Draft)
  - Analysis of Alternatives (COTS vs. Develop)

EWS-R FY 03 and 04 Activities

Acquisition

- Conduct Acquisition
  - Full and open
  - RFP Released 29 Jan 03
  - Industry Day 6 Feb 03 – 100+ attendees
  - Closing date 25 March 03, Re-opened 1 May

- Conduct evaluation
  - SSA and SSEB is assigned
  - Downselect to short list against criteria then Orals and Demos
  - Selection ~ early Aug 03

EWS-R FY 03 and 04 Activities

Joint Application Configuration

- Key process in COTS adaptation to MHS use
- Conducted at proposed demonstration sites on rotating basis
- Tri-Service representation in JAC process
- Supported by and coordinated with EWS-R configuration control board
- Final approved configured EWS-R is the version for demonstration to the 3 service sites (EWS-R 1.0)

EWS-R FY 03 and 04 Activities

Integration and Interfacing

- Commencing in FY 03 and continuing in FY 04
- Interfaces required to:
  - CHCS
  - CHCS II
  - DEERS
  - DMLSS
  - TOL
  - CCQAS
  - DMHRSi
  - EWF (on availability)
  - EWRAS
- EWS-R becomes the target application for on-line self scheduling via TRICARE On Line
- Integration commences May 03
- DT&E in FY 04

EWS-R FY 03 and 04 Activities

Implementation and Training

- Demonstration at 3 service sites
  - Site selection process with services is occurring
- Basic current plan for implementation is centered on CHCS legacy host structure
- Duration of implementation and sequencing will depend upon selected COTS solution
- Training plan to be developed concurrent with JAC sessions starting from existing COTS training package

Potential Implementation Options

- Phased or “layered” implementation
  - Install registration
  - Train and activate scheduling
  - Train and activate operating room scheduling
- Train all solutions and activate all at once
- Current estimate of personnel required at a site from RITPO is 10 people for six weeks
- Could be reduced after initial sites are implemented

Exit Criteria for Milestone B

- Mature program demonstrated by successful OT&E indicating operational effectiveness and suitability
- Concurrence from Senior Military Medical Advisory Council to proceed to MHS wide deployment
- Confirmation that appropriate regulatory requirements have been satisfied

Why Should You Care?

My Understanding of the DBA role(s)

- Key players in MHS Information Management
- Multi-tasked depending on site and “command integration” (% of time for small site DBA)
  - Analysis (10)
  - Reports (05)
  - Ad-Hocs (20)
  - System (other IT) administration (30)
  - Training (35)
- New systems bring new (%$^*?!!!) opportunities

THEREFORE you have skin in the game!

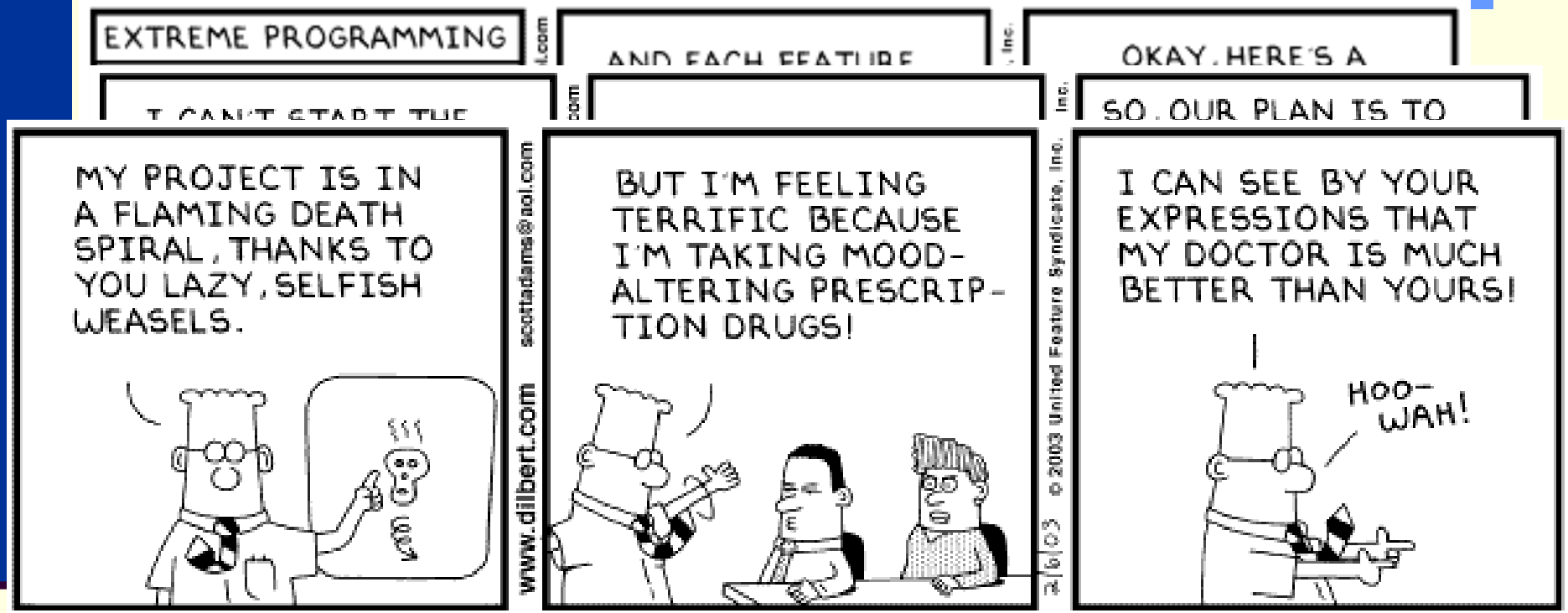
What Should we do? (now that we care)

- Engage DBA community on configuration and requirements level for:
  - Standardization of data
    - Where = at what level of the organization
    - How much = $\frac{\text{what can be accomplished}}{\text{TIME}}$
    - By what process = Who owns, validates, policies?
  - Definition of Training Elements in new systems
    - Definition of users vs. super-users
    - Role & responsibility in sustainment training

What Should we do? (now that we care)

- Engage DBA community on configuration and requirements level for:
  - Application associated tools and processes
    - Data Migration (legacy to new)
    - Data Storage where/how long/how much
    - Data Processing to “ultimate” locations
      - CDR
      - M-2
      - OLAP environment(s)
  - Testing and implementation planning

Questions?


EXTREME PROGRAMMING
AND EACH FEATURE
OKAY. HERE'S A
SO. OUR PLAN IS TO
MY PROJECT IS IN A FLAMING DEATH SPIRAL, THANKS TO YOU LAZY, SELFISH WEASELS.
BUT I'M FEELING TERRIFIC BECAUSE I'M TAKING MOOD-ALTERING PRESCRIP-TION DRUGS!
I CAN SEE BY YOUR EXPRESSIONS THAT MY DOCTOR IS MUCH BETTER THAN YOURS!
HOO-WAH!
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